

Remarks

Upon entry of the foregoing amendment, claims 12-16 are pending in the application, with claim 12 being the sole independent claim. Claims 1-11 were previously cancelled. Claims 15 and 16 were withdrawn from consideration by the Examiner.

Claim 12 is amended to correct a typographic error. The proposed amendment to claim 12 does not raise any new issues, nor necessitate any additional search of the art, since all of the elements of present claim 12 were disclosed previously. Applicants respectfully request that the foregoing amendment under 37 C.F.R. § 1.116 be entered thereby placing claim 12 in condition for allowance.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

I. Rejoinder of Claims 15 and 16

Upon allowance of elected invention, Applicants respectfully request rejoinder of dependent claims 15 and 16 to the elected invention.

II. Rejection under 35 U.S.C. § 103(a)

Claims 12-14 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lahm *et al.* (Int'l Patent Appl. Pub. No. WO 03/015518 A1) ("Lahm"). Applicants respectfully traverse this rejection.

A. Prima facie Case of Obviousness Has Not Been Established

As discussed in detail in Applicants' Reply of October 30, 2009, Lahm discloses compositions containing anthranilic acid amides and numerous mixing partners including, among numerous options, buprofezin, flonicamid or pirimicarb. (Lahm, page 96, line 23, through page 97, line 33; and claim 8). Thus, Lahm covers a long list of potential mixing partners for anthranilic acid amides which are of various chemical classes and mode of actions, whereas the captioned application is directed to a narrow selection of *synergistically effective* compositions of anthranilic acid amides and four mixing partners only. Lahm does not teach at all which mixing partners to choose from the list and in what mixing ratios to achieve *synergistically effective* compositions as claimed in the captioned application. Even the Examiner has acknowledged that "the reference does not provide any motivation to select this specific combination of variables (various insecticidal active compounds such as buprofezin, flonicamid and primicarb)." (Office Action, pages 4 and 5.)

However, the Examiner is of the opinion that presently claimed composition is simply an arrangement of old elements with each performing the same known function and yielding expected result, and thus obvious. According to the Examiner:

[T]he Supreme Court noted that the analysis under 35 USC 103 "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." KSR v. Teleflex, 127 S.Ct. 1727, 1741 (2007).

(Office Action, page 5.)

A flexible approach for establishing obviousness was set out in *KSR*. However, as cautioned by Judge Rader in a post-*KSR* decision in *In re Kubin*, 561 F.3d 1351 (Fed. Cir. 2009), "where a defendant merely throws metaphorical darts at a board filled with combinatorial prior art possibilities, courts should not succumb to hindsight claims of obviousness." (561 F.3d at 1359.) In the captioned application, nothing in Lahm would lead a skilled person to provide a composition as defined in present claims 12-14. The rejection is based upon impermissible hindsight and must be withdrawn.

In addition, claim 14 is directed to a composition comprising a synergistically effective combination of compound (I-a-4) and at least one anthranilamide of the formula (II-1). Lahm does not disclose compound (I-a-4) at all. Thus, claim 14 is not *prima facie* obvious over Lahm because one would not choose compound (I-a-4) as a mixing partner for the anthranilamides of the formula (II-1) in view of Lahm. Accordingly, for this additional reason, the rejection of claim 14 is improper and must be withdrawn.

Furthermore, even though the Examiner recognizes that Lahm "does not specifically teach the ratio of individual active ingredient," the Examiner again takes the position that Lahm teaches the mixing ratio of anthranilic acid amides to mixing partners being "at least a ratio of 1:1 (Page 89, line 18)." (Office Action, page 4.) Applicants respectfully disagree.

As previously noted by Applicants, page 89, lines 17 and 18 of Lahm reads: "The formulations will typically contain effective amounts of active ingredient, diluent and surfactant within the following approximate ranges that add up to 100 percent by weight."

Nothing in this text, nor the text thereafter, teaches the mixing ratio of "at least a ratio of 1:1," as asserted by the Examiner.

In sum, for at least the reasons stated above and in Applicants' Reply of October 30, 2009, nothing in Lahm would lead a skilled person to provide a composition as defined in present claims 12-14. As such, the Examiner has not established a *prima facie* case obviousness of claims 12-14. Withdrawal of the rejection is respectfully requested.

B. The Evidence of Synergistic Effects Rebuts Any Prima facie Case of Obviousness

Accompanying Applicants' Reply of October 30, 2009, Applicants submitted a Declaration under 37 C.F.R. § 1.132 by Dr. Wolfram Andersch ("the Declaration") to provide further evidence of synergistic effects obtained from presently claimed compositions. The Examiner has found the Declaration unconvincing allegedly because:

It is not clear in Table A which active ingredients are encompassed under II-4, no specific anthranilamides are disclosed with specific substituents. Claim 12 as recited lists formula for anthranilamide as (II-1) and there are various substituents that are shown in claim, therefore it is unclear as to what specific compound or compounds is the applicant referring to. Furthermore the declaration shows concentration with specific amounts and claims recite weight ratio which is quite broad, thus the declaration does not provide result for the full scope of the claims.

(Office Action, page 7.) Applicants respectfully disagree.

As previously pointed out by Applicants, the Declaration includes data obtained from various compositions that are encompassed by presently claimed compositions, but *do not* contain the elected species: flonicamid and/or compound II-1-4 of anthranilamide of formula II. For example, Table A includes data obtained from a composition containing

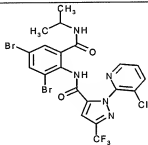
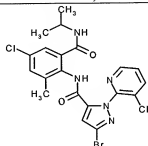
buprofezin (a non-elected compound of group (2)) and elected compound II-1-4 of anthranilamide of formula II; Table B1 includes data obtained from a composition containing elected flonicamid and compound II-1-54 (a non-elected compound of formula II). For the purpose of clarification, Applicants herein summarize data obtained from various compositions that are encompassed by presently claimed compositions *and* contain the elected species: compositions containing compound (I-a-4) or flonicamid and compound II-1-4 as follows:

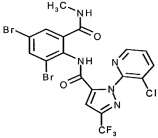
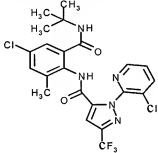
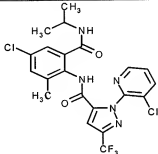
<u>Composition</u>	<u>Source</u>	<u>Mixing Ratio</u>	<u>Insect Tested</u>
Compound II-1-4 + compound (I-a-4)	Table B2 of the Declaration	1:25 Compound II-1-4 : Compound (I-a-4)	<i>Myzus persicae</i> Synergistic effect observed
Compound II-1-4 + Flonicamid	Table B3 of the Declaration	1:1 Compound II-1-4 : Flonicamid	<i>Myzus persicae</i> Synergistic effect observed
Compound II-1-4 + compound (I-a-4)	Table B3 of the Declaration	1:1 Compound II-1-4 : Compound (I-a-4)	<i>Myzus persicae</i> Synergistic effect observed
Compound II-1-4 + Flonicamid	Table C3 of the Declaration	1:625 Compound II-1-4 : Flonicamid	<i>Phaedon cochleariae</i> Synergistic effect observed
Compound II-1-4 + Flonicamid	Table D1 of the Declaration	1:625 Compound II-1-4 : Flonicamid	<i>Spodoptera frugiperda</i> Synergistic effect observed
Compound II-1-4 + compound (I-a-4)	Table E of the Declaration	1:25 Compound II-1-4 : Compound (I-a-4)	<i>Tetranychus urticae</i> Synergistic effect observed

As shown above, the Declaration has demonstrated synergistic effects of presently claimed compositions, over a wide range of different mixing ratios, in controlling different insects. Thus, the Declaration provides sufficient evidence that is commensurate with the

scope of claims 12-14. Accordingly, Applicants respectfully request that the rejection be reconsidered and withdrawn.

In addition, to further facilitate the Examiner's understanding of the Declaration and for the purpose of clarification, Applicants herein summarize other non-elected anthranilamides of formula II, which have been tested and described in the Declaration as follows, by setting forth various substituents that are recited in claim 12 (*see* Table on pages 15-16 of above-captioned application):

<u>Compound</u>	<u>Chemical Structure</u>	<u>Source</u>
Compound II-1-54	 <p>An anthranilamide of the formula (II-1), wherein R² is hydrogen; R³ is isopropyl; R⁴ is bromine; R⁵ is bromine; R⁷ is chlorine; and R⁹ is -CF₃.</p>	Tables B1, B2, C1, C2, D1, D2 and E of the Declaration; and specification as filed, page 20
Compound II-1-12	 <p>An anthranilamide of the formula (II-1), wherein R² is hydrogen; R³ is isopropyl; R⁴ is methyl; R⁵ is chlorine; R⁷ is chlorine; and R⁹ is bromine.</p>	Tables B1, B2, C1 and E of the Declaration; and specification as filed, page 17

<p>Compound II-1-52</p>	 <p>An anthranilamide of the formula (II-1), wherein R² is hydrogen; R³ is methyl; R⁴ is bromine; R⁵ is bromine; R⁷ is chlorine; and R⁹ is -CF₃.</p>	<p>Tables C1, C2, D2 and E of the Declaration; and specification as filed, page 19</p>
<p>Compound II-1-24</p>	 <p>An anthranilamide of the formula (II-1), wherein R² is hydrogen; R³ is tertiary-butyl; R⁴ is methyl; R⁵ is chlorine; R⁷ is chlorine; and R⁹ is -CF₃.</p>	<p>Tables C2 and E of the Declaration; and specification as filed, page 18</p>
<p>Compound II-1-9</p>	 <p>An anthranilamide of the formula (II-1), wherein R² is hydrogen; R³ is isopropyl; R⁴ is methyl; R⁵ is chlorine; R⁷ is chlorine; and R⁹ is -CF₃.</p>	<p>Table B4 of the Declaration; and specification as filed, page 17.</p>

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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